REMARKS

Claims 1-57 are currently pending in the subject application and are presently under consideration. Claims 1, 28 and 35 have been amended as shown at pp. 2-9 of the Reply. Claim 3 has been canceled.

Since the amended limitations merely emphasize subject matter as originally claimed, these limitations should already have been considered during an initial search in connection with the subject application. Pursuant to MPEP §714.13, applicants' representative submits that the amendments to these claims "only requires a cursory review by the Examiner" and thus, entry and consideration thereof is respectfully requested.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-27 Under 35 U.S.C. §103(a)

Claims 1-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rhodes (US App. No. 2003/0028631) in view of Hansen *et al.* (US App. No. 2003/0014399). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Rhodes and Hansen *et al.*, individually or in combination, do not teach or suggest each and every element as set forth in the subject claims.

> To reject claims in an application under §103, an examiner must show an unrebutted *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicants' disclosure. *See In re Vaeck,* 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed invention relates to systems and methods that facilitate information searches that automatically cut across different information sources while supporting fast information retrieval, filtering and sorting due to the indexing process. Rich contextual cues such as date,

author, thumbnails and previews are provided with retrieved items to aid the user in quickly recognizing items. More particularly, independent claim 1 recites a system that facilitates concurrent searching across a plurality of sources, comprising: *a usage analyzer that determines user accessed items and* ***a content analyzer that stores subsets of data corresponding to the items and sparse representations of the subsets, at least two of the items being associated with disparate sources, respectively, the disparate sources comprise local or remote data locations including files, folders, applications, images, audio files, appointments, email, and web information****; and an indexing component that indexes the data subsets.* Rhodes and Hansen *et al.*, individually or in combination, fail to teach or suggest such aspects of the claimed invention.

Rhodes discloses a network usage analysis system and method for providing updatable statistical representation of usage record events. A statistical model is generated from the set of record events and updated by adding the most recent record event to the statistical model. (*See* pg. 2, paragraphs [0017-0018]). The network usage analysis system of Rhodes provides direct statistical representation of network usage information. Rhodes defines network usage information as metadata information about the communication sessions and does not include the actual information exchanged in a communication session. (*See* pg. 1, paragraph [0004]). A statistical model is generated from the set of record events and updated by adding the most recent record event to the statistical model. A tracking table is utilized to track each customer's usage. Upon receipt of a new record event, only the portion of the accumulation table and statistical model associated with the new record event are updated. (*See* pg. 3, paragraph [0037] and pg. 4, paragraph [0045]).

In contrast, applicants' invention discloses a content analyzer that creates sparse representations of accessed data in the content index. For example, if the user has accessed a web page, the content analyzer may create a thumbnail representation of the web page and associate a hyperlink reference to the page and thumbnail. Further, the system includes one or more disparate information sources that are accessed or considered by a user, having dissimilar information content, whereby some of the information sources may represent local data locations such as files, folders, applications, images, audio files, appointments, email, and so forth, and other sources may represent remote sources such as web information, for example. (*See* pg. 6, lines 13-20). Rhodes is directed to an updatable statistical representation of metadata collected from a real-time stream of network usage data records generated by user activity on the Internet.

This metadata is stored in a statistical model and continuously updated. Accordingly, the network usage system of Rhodes does not store sparse representation of the data, nor does it store data associated with disparate sources. Thus, Rhodes is silent with regard to ***a content analyzer that stores subsets of data corresponding to the items and sparse representations of the subsets, at least two of the items being associated with disparate sources.***

Furthermore, Hansen *et al.* does not make up for the aforementioned deficiencies of Rhodes with respect to independent claim 1 (which claims 2-27 respectively depend there from). Hansen *et al.* relates to a method for organizing records of database search activity by topical relevance. The method comprises monitoring user search activity in a user population, extracting search sessions, determining groups of semantically related queries or paths based on search session data, determining probabilities that records in the database are relevant for each query, and maintaining a table associating an index for each record in the database with the probability that the record is relevant for each query. (*See* pg. 3, paragraph [0026]).

In contrast, applicants' invention discloses a content analyzer that creates sparse representations of accessed data in the content index. As stated *supra*, if the user has accessed a web page, the content analyzer may create a thumbnail representation of the web page and associate a hyperlink reference to the page and thumbnail. Hansen *et al.* merely discloses gathering URLs of HTML pages. Hansen *et al.* also discloses that for the purpose of enhancing Web search for HTML pages, it excludes embedded URLs (such as image files) from HTML pages. (*See* pg. 5, paragraph [0049]). Accordingly, Hansen *et al.* is silent with regard to ***a content analyzer that stores subsets of data corresponding to the items and sparse representations of the subsets...***

Further, applicants' system includes one or more disparate information sources that are accessed or considered by a user, having dissimilar information content, whereby some of the information sources may represent local data locations such as files, folders, applications, images, audio files, appointments, email, and so forth, and other sources may represent remote sources such as web information, for example. (*See* pg. 6, lines 13-20). Hansen *et al.* focuses on user queries submitted to a search engine, typically assisting users in searching for HTML documents on the World Wide Web. (*See* pg. 4, paragraphs [0044]-[0045]). Thus, Hansen *et al.* is silent with regard to storing disparate sources, ***wherein the disparate sources further comprise***

local or remote data locations including files, folders, applications, images, audio files, appointments, email, and web information...

In view of the aforementioned deficiencies of Rhodes and Hansen *et al.*, it is respectfully submitted that this rejection be withdrawn with respect to independent claim 1 (which claims 2-27 respectively depend there from). Accordingly, it is respectfully requested that these claims be deemed allowable.

II. Rejection of Claims 28, 30-34 Under 35 U.S.C. §103(a)

Claims 28, 30-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Egendorf *et al.* (US App. No. 2003/0177111) in view of Singer *et al.* (US Pat. No. 6,789,115). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Egendorf *et al.* and Singer *et al.*, individually or in combination, do not teach or suggest each and every element as set forth in the subject claims.

As stated *supra*, the claimed invention relates to systems and methods that facilitate concurrent searching across a plurality of sources while supporting fast information retrieval, filtering and sorting due to the indexing process. More particularly, independent claim 28 recites a method that facilitates concurrent searching across a plurality of sources, comprising: ***automatically monitoring a user and automatically analyzing a data source to determine whether the user has contemplated the data source;*** *automatically determining whether the user has contemplated the data source selected from at least two disparate data sources;* ***automatically storing subsets of data corresponding to the data source and sparse representations of the subsets;*** *and automatically indexing the contemplated data source in a computerized index.* Egendorf *et al.* and Singer *et al.*, individually or in combination, does not expressly or inherently disclose the aforementioned novel aspects of applicants' invention as recited in the subject claims.

Egendorf *et al.* discloses a method for searching from a plurality of data sources. A customized query is sent to each database, wherein the query is automatically generated without the need for human programming. The query is generated based on information on how to query gained directly from each information source. This query information is contained in a descriptive packet associated with the information source, and is further contained in a database.

A user search request then prompts retrieval of all relevant information sources which matches the search parameters. (*See* pg. 5, paragraphs [0055]-[0060]).

In contrast, applicants' invention discloses concurrent searching across a plurality of sources, wherein user activities are monitored and events relating to when information has been accessed or seen by the user are recorded (*e.g.,* monitor desktop mouse and keyboard activities and record index event when user selects or contemplates an information item) for determining when an information item has been accessed or previously contemplated before automated indexing of the item occurs. In one aspect, files can be examined for such information as date opened or created, last accessed, and/or other indicia indicating if the information item has already been observed. Egendorf *et al.* is directed to searching *via* a customized query. Accordingly, the method of Egendorf *et al.* does not monitor or record events relating to what information has been accessed or seen by the user. Thus, Egendorf *et al.* is silent with regard to ***automatically monitoring a user and automatically analyzing a data source to determine whether the user has contemplated the data source.*** (*See* Office Action dated April 7, 2006, page 9).

Further, applicants' invention discloses the automatic storing of subsets of data and sparse representations of the subsets. Sparse representations of the subsets of accessed data are stored in a computerized index. For example, if the user has accessed a web page, the content analyzer may create a thumbnail representation of the web page and associate a hyperlink reference to the page and thumbnail. Egendorf *et al.* merely discloses the use of descriptive packets associated with the information sources. The descriptive packets contain query information specific to each information source. Thus, Egendorf *et al.* is silent with regard to ***automatically storing subsets of data corresponding to the data source and sparse representations of the subsets...***

Furthermore, Singer *et al.* does not make up for the aforementioned deficiencies of Egendorf *et al.* with respect to independent claim 28 (which claims 30-34 respectively depend there from). Singer *et al.* relates to a system for capturing, analyzing, storing and reporting system-users' usage of multiple internet and/or intranet web servers. At each web server in the system, the actions by the system-user create a server log that is processed by the system on a continuous basis. On a periodic basis, one or more collection servers in the system copy the processed log files from each web server on the system, zip the files and transfer the files to an

analysis server. After the collection is complete, an analysis server processes the data and stores it in a relational database that supports various user-specified daily, monthly and quarterly reports of the usage data. (*See* Abstract).

Singer *et al.* does not disclose a system wherein the data is stored as subsets and sparse representations of the subsets. Applicants' invention discloses the automatic storing of subsets of data and sparse representations of the subsets. Sparse representations of the subsets of accessed data are stored in a computerized index. For example, if the user has accessed a web page, the content analyzer may create a thumbnail representation of the web page and associate a hyperlink reference to the page and thumbnail. Singer *et al.* merely discloses the collecting, analyzing and reporting of high volume multi-web server usage. Thus, Singer *et al.* is silent with regard to ***automatically storing subsets of data corresponding to the data source and sparse representations of the subsets***...

In view of the aforementioned deficiencies of Egendorf *et al.* and Singer *et al.*, it is respectfully submitted that this rejection be withdrawn with respect to independent claim 28 (which claims 30-34 respectively depend there from). Accordingly, it is respectfully requested that these claims be deemed allowable.

III. Rejection of Claim 35 Under 35 U.S.C. §102(a)

Claim 35 stands rejected under 35 U.S.C. §102(a) as being anticipated by Grefenstette *et al.* (US Pat. No. 6,446,035). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Grefenstette *et al.* does not anticipate each and every element as set forth in the subject claim.

> A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

As stated *supra*, the claimed invention relates to systems and methods that facilitate concurrent searching across a plurality of sources while supporting fast information retrieval,

filtering and sorting due to the indexing process. More particularly, independent claim 35 recites a system that facilitates computerized searching, comprising: *means for determining when a user has accessed an information item; means for filtering the information item;* ***means for storing subsets of data corresponding to the information item and sparse representations of the subsets, at least two of the items being associated with disparate sources such as local and remote data sources****; means for indexing the subsets of data and sparse representations of the subsets in a content index; and mean for querying the content index.* Grefenstette *et al.* does not expressly or inherently disclose the aforementioned novel aspects of applicants' invention as recited in the subject claim.

Grefenstette *et al.* discloses a system for finding groups of people based on linguistically analyzable content of resources accessed. The system obtains expression/person data that identifies at least one person who has accessed a resource that includes an expression type. An expression type is identified by performing linguistic analysis on the text of a Web page or other accessed resource. The expression type data can then be associated with an identifier of the person who accessed the Web page, such as a logon name. The expression data is then stored in a database and the group information can be obtained in response to a query from a user. (*See* col. 2, line 46-col. 3, line 13).

In contrast, applicants' invention discloses a means for storing subsets of data corresponding to the information item and sparse representations of the subsets. For example, if the user has accessed a web page, the content analyzer may create a thumbnail representation of the web page and associate a hyperlink reference to the page and thumbnail. Further, the system includes one or more disparate information sources that are accessed or considered by a user, having dissimilar information content, whereby some of the information sources may represent local data locations such as files, folders, applications, images, audio files, appointments, email, and so forth, and other sources may represent remote sources such as web information, for example. (*See* pg. 6, lines 13-20). Grefenstette *et al.* is directed to a system that performs linguistic analysis on data associated with an accessed resource and saves this data in a database. The data memory stores database entries and identity data with information about the identities of people who access resources. (*See* col. 11, lines 3-11). Accordingly, Grefenstette *et al.* does not store subsets or sparse representations of the data. Thus, Grefenstette *et al.* is silent with regard to ***a means for storing subsets of data corresponding to the information item and sparse***

representations of the subsets, at least two of the items being associated with disparate sources such as local and remote data sources...

In view of at least the above, it is readily apparent that Grefenstette *et al.* fails to expressly or inherently disclose applicants' claimed invention as recited in independent claim 35. Accordingly, it is respectfully requested that this claim be deemed allowable.

IV. Rejection of Claims 36-57 Under 35 U.S.C. §102(a)

Claims 36-57 stand rejected under 35 U.S.C. §102(a) as being anticipated by Raboczi *et al.* (US App. No. 2003/0061209). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Raboczi *et al.* does not anticipate each and every element as set forth in the subject claims.

As stated *supra*, the claimed invention relates to systems and methods that facilitate concurrent searching across a plurality of sources while supporting fast information retrieval, filtering and sorting due to the indexing process. More particularly, independent claim 36 recites a user interface for computerized searching of data, comprising: ***a display having one or more display objects representing results gathered from monitoring information items previously observed by a user****; and at least one input option associated with the display to facilitate user queries of the information items*. Raboczi *et al.* does not expressly or inherently disclose the aforementioned novel aspects of applicants' invention as recited in the subject claim.

Raboczi *et al.* discloses a computer user interface tool for navigation of data stored in directed graphs. A user can search a database of documents or metadata by formulating a query and submitting the query *via* the user interface. A query engine processes the query and returns a list of nodes in the directed graph that satisfy the query. Using the user interface, the user is able to narrow the list of hits by selectively choosing from the list of metadata. (*See* pg. 1, paragraph [0016]-pg. 2, paragraph [0019]).

In contrast, applicants' invention discloses a user interface that facilitates computerized searching, wherein user activities are monitored and events relating to when information has been accessed or seen by the user are recorded (*e.g.,* monitor desktop mouse and keyboard activities and record index event when user selects or contemplates an information item) for determining when an information item has been accessed or previously contemplated. In one aspect, files can be examined for such information as date opened or created, last accessed,

and/or other indicia indicating if the information item has already been observed. Raboczi *et al.* is directed to utilizing a user interface for searching an existing database of documents. A user enters search criteria and those emails in the data store that satisfy the criteria are displayed in the user interface. (*See* pg. 5, paragraph [0069]). Raboczi *et al.* does not disclose monitoring user activities and displaying the results obtained. Accordingly, Raboczi *et al.* does not monitor or record events relating to when information has been accessed or seen by the user. Thus, Raboczi *et al.* is silent with regard to a user interface comprising ***a display having one or more display objects representing results gathered from monitoring information items previously observed by a user.***

In view of at least the above, it is readily apparent that Raboczi *et al.* fails to expressly or inherently disclose applicants' claimed invention as recited in independent claim 36 (and claims 37-57 which depend there from). Accordingly, it is respectfully requested that these claims be deemed allowable.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP392US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN, TUROCY & CALVIN, LLP

/Himanshu S. Amin/
Himanshu S. Amin
Reg. No. 40,894

AMIN, TUROCY & CALVIN, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731